

AMENDMENT TO THE CLAIMS

1-13. (Canceled)

14. (currently amended) An electricity generation system comprising:

    a first generator;

    a first controller coupled directly to the first generator;

    a second generator;

    a second controller coupled directly to the second generator; and

    a remote control and monitoring node coupled to the first and second controllers to monitor and control the first and second generators; and

wherein the first generator is a fossil-fuel based generator, and the first controller comprises a continuous emissions monitoring system to monitor qualitative emissions relative to the first generator.

15. (Original) The system of claim 14, wherein the first generator includes a primary power source selected from a group consisting of a reciprocating diesel engine, reciprocating gas engine, gas turbine, steam turbine, package boiler, and waste heat boiler.

16. (Original) The system of claim 14, wherein the first controller includes an embedded personal computer (PC) controller.

17. (Original) The system of claim 14, wherein the first controller provides local monitoring and control relative to the first generator.

18. (Original) The system of claim 14, wherein the first controller senses a phase of electricity in a power grid to match a phase of electricity generated by the first generator to that of the power grid.

19. (Original) The system of claim 14, wherein the node is coupled to the first and second controllers through a communication medium selected from the group consisting of a wireless interface, a local area network interface, a wide area network interface, and a fiberoptic link.

20. (Original) The system of claim 14, wherein the control node includes an Application Service Provider.

21. (Canceled)

22. (Currently Amended) The system of claim 1421, wherein the first controller measures power output of the first generator.

23. (Original) The system of claim 22, wherein the first controller measured power generation cost of the first generator.

24. (Original) The system of claim 22, wherein the first controller measures thermal efficiency of the first generator.

25. (Currently Amended) The system of claim 1421, wherein the first controller is adapted to receive data indicative of a parameter of the first generator, and provide an input to the first generator based upon an optimization algorithm.

26. (Original) The system of claim 25, wherein the parameter is selected from the group consisting of exhaust gas composition,

unburned fuel in an emission stream, emission volume, emission heat, emission noise, engine speed, engine hours remaining before maintenance, engine throttle position, engine oil pressure, engine temperature, engine oil level and fuel composition.

27. (Original) The system of claim 25, wherein the input is selected from the group consisting of a start signal, a shut-down signal, and a throttle signal.

28. (Original) The system of claim 14, wherein the control node is adapted to report data relative to the system.

29. (Original) The system of claim 28, wherein the data facilitates area monitoring.

30. (Original) The system of claim 29, wherein the node adjusts the first and second generators through their respective controllers to reduce aggregate pollution.

31. (Original) The system of claim 14, and further comprising Light Detection and Ranging (LIDAR) equipment adapted to monitor an environment of the first generator.

32-36. (Canceled)